

IN THE CLAIMS

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 9, 19, 20, and 21 are amended.

Claim 18 is canceled.

Listing of Claims:

1-8. (Canceled)

9. (Currently Amended) A method for producing a surface acoustic wave device having a piezoelectric substrate, a first interdigital electrode and a second interdigital electrode formed on the substrate so that the first and second interdigital electrodes are opposed to each other, the first and second interdigital electrodes including an insulating layer in surfaces thereof, the method comprising:

(a) forming ~~[[a]]~~ the first interdigital transducer electrode and ~~[[a]]~~ the second interdigital transducer electrode on a the piezoelectric substrate so that the first and second interdigital ~~transducers~~ electrodes are opposed to each other; ~~[[and]]~~

(b) forming a doping region in a surface between the first and second interdigital ~~transducers~~ electrodes by doping the surface of the substrate with a substance in at least one form selected from the group consisting of atoms, molecules and clusters before or after the process (a); and

(c) forming the insulating layer in surfaces of the first and second interdigital electrodes by doping the surfaces of the first and second interdigital electrodes with impurities after the process (a).

wherein the processes (b) and (c) are performed at the same time by doping with the substance used for the process (b).

10. (Original) The method for producing a surface acoustic wave device according to claim 9, wherein the substrate is doped with the substance in a depth of not more than 50nm from the surface of the substrate.

11. (Original) The method for producing a surface acoustic wave device according to claim 9, wherein the doping region has a lower resistance than that of an inner portion of the substrate.

12. (Original) The method for producing a surface acoustic wave device according to claim 11, wherein a sheet resistance of the doping region is in a range from $10^8 \Omega/\square$ to $10^{15} \Omega/\square$.

13. (Original) The method for producing surface acoustic wave device according to claim 9, wherein the substrate is doped with the substance in ionized form.

14. (Original) The method for producing a surface acoustic wave device according to claim 13, wherein a dose of the substance is in a range from 1×10^{13} ions/cm² to 1×10^{17} ions/cm².

15. (Original) The method for producing a surface acoustic wave device according to claim 13, wherein the substrate is doped with the substance at an energy of 0.01keV to 10keV.

16. (Original) The method for producing a surface acoustic wave device according to claim 13, wherein the substance is a substance obtained by ionizing at least one selected from the group consisting of a reducing gas, silane, nitrogen, oxygen, argon, silicon, arsenic, boron, phosphorus, tin, indium, chromium, tantalum, molybdenum, germanium, and nickel.

17. (Original) The method for producing a surface acoustic wave device according to claim 9, wherein the substrate is doped with the substance by at least one technique

selected from the group consisting of ion implantation, ion doping, plasma doping, laser doping and vapor phase doping.

18. (Canceled)

19. (Currently Amended) The method for producing a surface acoustic wave device according to claim [[18]] 9, wherein the impurities are the same substance as said substance, and the process (c) is performed at the same time as the process (b).

20. (Currently Amended) The method for producing a surface acoustic wave device according to claim [[18]] 9, wherein the impurities are oxygen or nitrogen.

21. (Currently Amended) The method for producing a surface acoustic wave device according to claim [[18]] 9, wherein an average thickness of the insulating layer is in a range from 2nm to 500nm, and a resistivity of the insulating layer is not less than $10^6 \Omega$ cm.

22. (Canceled)